

IN THE CLAIMS:

Claim 1 (Currently Amended): An image processing device, comprising:

an input part to which image data represented by a plurality of colors including black is input;

a branching unit that identifies a type of image data automatically;

a black area detector that detects a black area in the image data identified by the branching unit;

an image interpreting unit that sequentially interprets the image data detected by the black area detector regardless of contents of the image data in a background of the black area; and

an output part that adds color materials, except a black material, of a predetermined amount to the black area and outputs the color materials and the black material.

Claim 2 (Currently Amended): An image processing device, comprising:

an input part to which image data represented by a plurality of colors including black is input;

a branching unit that identifies a type of image data automatically;

a black area detector that detects a black area in the image data identified by the branching unit;

an image interpreting unit that sequentially interprets the image data detected by the black area detector regardless of contents of the image data in a background of the black area;

an edge detector that detects an edge of the black area; and

an output part that adds color materials, except a black material, of an amount according to colors in the periphery of the edge to the edge, adds the color materials, except the black material, of a predetermined amount to the black area except the edge and outputs the color materials and the black material.

Claim 3 (Original): An image processing device according to Claim 2, further comprising:

an adjuster that adjusts the amount of the color materials except the black material added to the edge in case a total amount of the color materials and the black material to be output to the edge exceeds a predetermined amount.

Claim 4 (Original): An image processing device according to Claim 1, wherein the output part is based upon primary colors of black (K), yellow (Y), magenta (M), and cyan (C); and

an amount of each color material of the Y, M, C, is output to the black area in a range of 10 to 40 % (percentage by weight) of the amount of the black material.

Claim 5 (Original): An image processing device according to Claim 4, further comprising:

a reduction unit that reduces the amount of the color material of the Y, M, C, keeping the amount of the black material in case a total amount of the color material of K, Y, M, C exceeds a predetermined value.

Claim 6 (Currently Amended): An image processing method, comprising the steps of:
inputting image data represented by a plurality of colors including black;
identifying a type of image data automatically;
detecting a black area in the identified image data;
interpreting the detected image data sequentially regardless of contents of the image data
in a background of the black area; and
adding color materials, except a black material, of a predetermined amount to the black
area and outputting the color materials and the black material.

Claim 7 (Currently Amended): An image processing device, comprising:
an input part to which image data represented by a plurality of colors including black is
input;
a branching unit that identifies a type of image data automatically;
a black area detector that detects a black area in the image data identified by the
branching unit;
an image interpreting unit that sequentially interprets the image data detected by the
black area detector regardless of contents of the image data in a background of the black area;
an image determination unit that determines a type of an image in each area in the image
data; and
an output part that adds color materials, except a black material, of a predetermined
amount to an area determined to hold a predetermined type by the image determination unit and
detected as a black area by the black area detector and output the color materials and the black
material.

Claim 8 (Previously Presented): An image processing device according to Claim 7, wherein the output part adds color materials, except the black material, of a predetermined amount to an area determined to hold a character by the image determination unit and detected as a black area by the black area detector and outputs the color materials and a black material.

Claim 9 (Currently Amended): An image processing method, comprising the steps of: inputting image data represented by a plurality of colors including black; identifying a type of image data automatically; interpreting the identified image data sequentially regardless of contents of the image data in a background of the black area; and adding color materials, except a black material, of a predetermined amount to an area determined to hold a predetermined image type and detected as a black area from among areas in the image data and outputting the color materials and the black material.